

WHAT IS CLAIMED IS:

1. Device for filtering particles from a stream, with an inflow channel (1) for the inlet and at least one outflow channel (2) opening into the first channel for the outlet of the stream, the outflow channel (2) having a channel-shaped extension element (4) which extends with a free end into the first channel (1), wherein at the free end of the extension element a cover element (6) is arranged which covers an end inflow aperture (4a) of the extension element at the end of the free end, such that a straight-line inflow into the extension element is prevented.
2. Device according to claim 1, wherein the cover element (6) is arranged spaced upstream of the end (4a) of the free end of the extension element (4).
3. Device according to claim 1, wherein the cover element (6) closes the end inflow aperture (4a).
4. Device according to one of the foregoing claims, wherein the extension element (4) has at least one laterally arranged inflow aperture (5).
5. Device according to one of the foregoing claims, wherein the cover element (6) is constituted hood-shaped, and axially at least partially covers the extension element (4).
6. Device according to claim 5, wherein the cover element (6) extends axially over at least one laterally arranged inflow aperture (5) of the extension element (4).
7. Device according to one of the foregoing claims, wherein at least one further outflow channel (3) is arranged, which opens, substantially flush with the wall of the inflow channel (1), into this.

8. Device according to one of the foregoing claims, wherein the extension element (4) extends over a distance in the first channel (1) which at least corresponds to the diameter of that outflow channel (2) on which it is arranged.
9. Use of the device according to one of the foregoing claims in a cooling system of a flow machine, in particular a gas turbine and/or steam turbine plant.
10. Use according to claim 9, wherein the at least one outflow channel (2) is connected to at least one dust-sensitive cooling channel, and wherein the one or more third channels (3) are connected to stream channels, in particular cooling channels, which are insensitive to dust or dirt particles.
11. Use according to one of claim 9 or 10, wherein the at least one outflow channel (2) is in flow connection with cooling channels of guide and running vanes of a turbine.